

Table I-8. The electronegativities of metal cations ( $X_M^{+z}$ ) and nonmetal ions ( $X_A^z$ ).

Z	z	$X_M^{+z}$	Z	z	$X_M^{+z}$	Z	z	$X_M^{+z}$	Z	z	$X_M^{+z}$
Ac-89	3	1	Ga-31	3	1.6	Pd-46	2	2	Tl-81	1	1.5
Ag-47	1	1.8	Gd-64	3	*1.1		3	*2.1		3	1.9
Al-13	3	1.5	Ge-32	4	1.8	Pm-61	3	*1.1	Tm-69	3	*1.1
Am-95	3	*1.1	Hf-72	4	1.4	Po-84	4	2	U-92	4	1.4
As-33	3	2	Hg-80	1	*1.7	Pr-59	3	*1.1		6	*1.6
	5	2.1		2	1.8	Pt-78	1~4	*2.2	V-23	3	*1.55
At-85	5	2.2	Ho-67	3	*1.1	Pu-94	3,4	1.1		4	1.7
Au-79	3	2.3	In-49	1	*1.5	Ra-88	2	*0.85		5	1.9
B-5	3	2		3	*1.6	Rb-37	1	0.8	W-74	2	*1.8
Ba-56	2	0.9	Ir-77	3,4	2.2	Re-75	3	*2.0		4	*1.9
Be-4	2	1.5	K-19	1	0.8		5	*2.1		6	2.0
Bi-83	3	1.8	La-57	3	1.1		7	2.2	Y-39	3	1.2
C-6	4	2.5	Li-3	1	0.95	Rh-45	2,3	2.1	Yb-70	2	*1.0
Ca-20	2	1	Lu-71	3	1.15	Ru-44	3	*2.1		3	*1.2
Cd-48	2	1.5	Mg-12	2	1.2	S-16	2,4	*2.5	Zn-30	2	1.5
Ce-58	3	1.1	Mn-25	2	1.5		6	(2.3)	Zr-40	4	1.4
	4	*1.4		3	*1.7	Sb-51	3	1.9			
Cl-17	7	(2.5)		7	2.5		5	2.1			
Cm96	3	*1.2	Mo-42	2	*1.8	Sc-21	3	1.3			
Co-27	2	1.8		4	*1.9	Se-34	4	*2.4			
	3	1.9		6	*2.0	Si-14	4	1.8			
Cr-24	2	1.5	N-7	5	(3)	Sm-62	2	*1.0	Nonmetal ions		
	3	1.6	Na-11	1	0.9		3	*1.1	Z	z	$X_A^z$
	6	2.2	Nb-1	3	*1.5	Sn-50	2	1.7	As-33	3	2
Cs-55	1	0.75		5	*1.7		4	1.8	Br-35	-1	2.8
Cu-29	1	1.8	Nd-60	3	1.1	Sr-38	2	1	C-6	4	2.5
	2	2	Ni-28	2	1.8	Ta-73	3	*1.6	Cl-17	-1	3
Dy-66	3	*1.1		3	*1.9		5	1.7	F-9	-1	4
Er-68	3	*1.1	O-8	6	(3.5)	Tb-65	3	*1.1	H-1	1	2.1
Eu-63	2	*0.9	Os-76	3,4	2.2	Tc-43	7	2.3	I-53	-1	2.5
	3	*1.2	P-15	3,5	2.1	Te-52	4	*2.1	N-7	3	3
F-9	7	(4)	Pa-91	4	*1.35	Th-90	2	*1.1	O-8	-2	3.5
Fe-26	2	1.7		5	*1.45		4	*1.2	P-15	3	2.1
	3	1.8	Pb-82	2	1.6	Ti-22	2	1.4	S-16	-2	2.5
Fr-87	1	0.7		4	*2.0		4	1.6	Se-34	4	2.4
									Si-14	4	1.8

Source: Data are mainly from Gordy and Thomas (1956) and Pauling (1960) except for those with an asterisk, which are newly calculated. The  $X_M^{+z}$  's in parentheses are extrapolated values from Figure I-17.

Note: Z and z are atomic number and the charge of ions respectively.